BOEM DEEPWATER GULF OF MEXICO HISTORY PROJECT

Interviewee:	Elmo Hubble
Date:	July 2, 2009
Place:	Lafayette, Louisiana
Interviewer:	Jason Theriot
Ethnographic preface:	Elmo Hubble grew up in the oilfields of Illinois, and graduated from Oklahoma University in 1958 with a degree in petroleum engineering. Hubble worked for the Federal Power Commission in Washington, D.C., for part of the 1960s, but found the U.S. Geological Survey far more amenable to his background and interests. After a stretch in New Mexico, Hubble transferred to New Orleans in 1964. There he helped to establish the Lafayette office of the USGS Conservation Division—later merged into the Minerals Management Service—and was elevated as MMS District Manager for Lafayette, covering offshore operations.

JT: This is an interview with Mr. Elmo Hubble on July 2, 2009. We're at Mr. Hubble's home here in Lafayette on 100 Huntington Drive, and this is Jason Theriot, and this is for the MMS Deepwater History Project. Mr. Hubble was district manager?

EH: Yes.

JT: District manager for MMS in the Lafayette area, which was South Marsh Island, Vermillion—

EH: East Cameron.

JT: —and East Cameron, and we'll talk a little about that. So, basically, Mr. Hubble, in an oral history interview what we try to do is get a little bit of the person's background, so kind of how I talked with you a little bit on the phone. Tell me a little bit about where you're from and your background in engineering and then in mining and how you came to be involved with the MMS.

EH: I'm originally from Illinois, southern Illinois, and I grew up in the oilfields in Illinois and decided that I wanted to be an engineer, and there wasn't any petroleum engineering schools in Illinois, so I went to Missouri School of Mines at Rolla, Missouri, for one year. I transferred down to Oklahoma University and graduated from Oklahoma University in 1958 with a degree in petroleum engineering, and in 1958 it was a recession and nobody was hiring.

I finally got an offer the day I graduated to go to Farmington, New Mexico, so I went to Farmington, New Mexico, as a petroleum engineer. And when I say Farmington, I'm talking about 70 miles from Farmington in a camp. We had oil production. We had drilling going on. We had the whole works. But we lived in the camp. We were there for about two and a half years, but the problem with that was it's twenty-eight miles of dirt road before you got to the highway, and a lot of times the bridges or whatever would wash out because there were dry washes and only time it'd run is when you had a meltdown, and it would wash out the bridges.

So, anyway, after we had a child, we decided that we needed a change, and I went to work for the Federal Power Commission in Washington, D.C., in 1961, and I didn't like that at all. It was too busy up there. It was too many people and everything. I'd heard about some people up there that worked for the U.S. Geological Survey as engineers, so I talked to them, and they said, "Yes, we'll hire you." Fact is, they said that they would hire me and transfer me to Hobbs, New Mexico. So I had just come from New Mexico and my car still had New Mexico license plates on it, so I transferred to Hobbs, New Mexico, and worked as a petroleum engineer out there in the district from '61 till '64.

In the spring of '64, they wanted to give me a promotion, and they couldn't in Hobbs and what have you, and they told me that they had two places that I could go to. One of them was Casper, Wyoming, and the other one was New Orleans. I said, "Where do they need me the most?" They said, "New Orleans." I said, "Okay, I'll take New Orleans." So I came to New Orleans. I moved to New Orleans in 1964 and never had experienced a hurricane before, and first year there, we had Hurricane Hilda. 1965, we had Hurricane Betsy.

Lafayette district was opened in about 1965, and in 1966 they needed an assistant in the Lafayette district, so I got the opportunity to transfer to Lafayette in 1966, and I was the assistant district engineer at that time. So I worked here in the district. In 1974, I got promoted to district engineer from assistant district engineer, and then in '74 I was the district supervisor for Lafayette, and then later on, I can't remember the exact date on that, but it was changed to district managers because of the work that we were doing, because we had when I retired—well, at one time we had twenty-some people that were supervising. We had engineers, a drilling, production, completion. We had geologists, geophysicists. We had petroleum techs that went offshore every day and inspected. So, in charge of a lot of people and handled a big—what do I want to call it? A big requirement to do a lot of different things, various tasks.

So, anyway, now that brings me up to being district supervisor or district manager. What else would you want me to tell you about that? Do you want me to start—I can tell you about like the beginning of the Gulf, like the OCS Lands Act, all of that. I mean, I'm familiar with all that part of it.

JT: Let's do this. Let's back up a little bit. Tell me what type of job a petroleum engineer entails working for the USGS for those couple of years that you were on board with them. What kind of stuff did they have you doing?

EH: I couldn't tell you all that, really.

JT: I guess what I'm getting at is what type of work were you doing when you got to New Orleans for those first couple years?

EH: Everything over there. At that time, they weren't that specialized, because when I moved to New Orleans there probably wasn't—see, the office originally in New Orleans was open in about 1956. They only had a few people. In fact, at one time it was handled out of Tulsa office, the offshore. Then they moved it to New Orleans, and I moved there in 1961.

So we handled pipelines. See, at that time, we didn't have all of the things that we had at a later date. For instance, we did not approve the setting of platforms. They set their own platform. They set them, supposed to had the right integrity and all that, and it wasn't till later on that they opened up an office and said, "We

are going to check each one of these structures to make sure it's designed properly," and so forth.

JT: So for pipeline, you guys were regulating pipelines or what?

EH: Oh, yeah, still do.

JT: In the early sixties?

EH: Oh, yeah. Now I say regulating. Not like it is now. But we had pipelines. They'd tell us they were going to install a pipeline. Now, we're talking about flow lines as such, because you've got two categories. You got pipelines that are under DOI. You've got pipelines that are—not Department of Energy—DOT. DOT lines, which is regulated out of Houston, and there's a separate—so when it comes up and if there's a sale on that platform, then the jurisdiction goes over to them, to their office. But it's spelled out, I think in the pipeline book. In the regulations on pipelines, there's one of them—I don't remember know which one it is—that is all about pipelines, and it lays it all out.

JT: So were you ever involved in looking at pipelines, and did you guys have to file permits or have the companies file permits?

EH: They didn't at the beginning, but somewhere along the line, and I can't remember where it was, they came in with the OCS orders, and it required them to file all these. Then each year or every so often, they would expand it and it'd get bigger. I don't know whether you know this or not, but in 1969 all these applications that we would get over there to drill and to do different things in New Orleans at that time might just have a one-page attachment to it that said what they have to do. I think they only had about four or five of those, for one to drill and one for something else.

In 1969 off California, Union Oil had an oil spill, and as a result of that, Hodel, I think the Secretary of the Interior, said, "We need to make these regulations a lot more comprehensive and bigger."

JT: Santa Barbara changed a lot, didn't they?

EH: Yes, Santa Barbara changed a lot. It came in and I mean, it expanded them tremendously. In fact, in New Orleans there's a complete list, and I gave it to them over there somewhere, a list of all the orders from the very beginning, showing how it's just one page on some of them to what the present is right now. Some of them, it got that thick.

So, anyway, but in New Orleans at that time, we did a lot of different things, but like commingling and—oh, I don't know, had a lot of projects. I worked on

projects with the Corps of Engineers. But, anyway, like the Corps of Engineers wanted to see about having a deepwater channel all the way from New Orleans to the Gulf of Mexico, and they came to us and said, "Okay, now, we got these many platforms out here. In the next fifty years, how many platforms and things will you have out there?" So we had to go in here and say, "Okay, we got this many now. We expect this many more," and so forth, and come up with a figure.

JT: So it was a lot of coordinated efforts with other agencies as well.

EH: Oh, yeah.

JT: So you had USGS; you had the Army Corps. Was it Bureau of Mines, or was it Department of Interior?

EH: Department of Interior. Bureau of Mines we didn't deal with at all.

JT: That was on the West Coast, probably.

EH: Yeah. Well, now, the Bureau of Land Management. The Bureau of Mines, that's strictly helium and what have you. Bureau of Land Management, it used to be USGS out on the West Coast, and then whenever they came up with the deal with Minerals Management Service, which I had that down here in a minute—

JT: That would have been in the eighties, right, early eighties?

EH: USGS, '82.

JT: Eighty-two is when they consolidated BLM and USGS to form Minerals Management Service, correct?

EH: No. What they did, they took the USGS and they divided all of the onshore lands and Indian reservations and things and put it under BLM. Now, they took all of the offshore and put it under Minerals Management Service. So Minerals Management doesn't have any onshore lands, only offshore, and at that time the reason for it is because of Geological Survey had four different divisions: Topographic, they had the Water Resources, they had the Geologic, the Conservation. We were under the Conservation, and we handled all that.

Our budget, we brought in a lot of money, so it was easy for us to get money for our budget because we brought it in. Well, the other three divisions didn't, so they were always trying to help do projects for us and get money from us. So the Secretary of the Interior decided in 1982 that the MMS is important enough that they make a bureau underneath the Secretary of the Interior that answers to the Secretary of the Interior, not to the Geological Survey. Before, we'd answer to the director of the Geological Survey, and the director of the Geological Survey

would answer to the Secretary of the Interior. So they cut that out and said, "Okay, you're going to be responsible directly to us, because it's so important," because there was a lot going on.

JT: Yes, as you can see on this map.

EH: Yes, and I don't know if you have any idea, but there's anywhere from two and a half to three and a half billion dollars that's brought in from the offshore revenues each year. But, anyway, that's the story on that.

JT: So, under Conservation, what other issues were you guys in charge of dealing with? What about natural gas flaring? Was that under your jurisdiction?

EH: Oh, yes. Oh, yes. And fact is, that was under us. Under Conservation we had that, and then when it went over to MMS, it's still there. It's still on both sides. We got different regulations for it. Onshore, you have to handle that different than you would like for offshore.

I moved here in '66. In 1965, I was doing some inspections offshore out of the New Orleans office, because the district engineer was gone and they wanted us to do some inspections. So we would go to Cameron and different places and go offshore to inspect the platform to make sure that they had signs and stuff on there, because they were all shut in. Everything from about Intracoastal City west is gas. Everything from the Intracoastal City to the east is oil, mostly oil. There's some gas, but there's mostly oil. We were going out in that area and there were just platforms that were shut in because they couldn't sell the gas. So there didn't get to be a big demand for it until in the seventies or so, and then it became very important.

Now, see, here's something else that you probably don't realize. Originally, the OCS Lands Act in 1953, when it came about, there was already leases offshore. The state had already issued some leases, and, fact is, one of them here, like Rabbit Island and the one Texaco has right down here, Tiger Shoal, the state had already issued leases, and so then in '53 when the federal government took over, they said, "Well, we're going to have to do something." So what they did, these leases—you'll hear two kinds of leases: Section 6 and Section 8. Section 6 is the leases that the state had, and because they leased them with Section 6 because they get a one-eighth royalty rate plus severance tax. So all these leases that were issued by the state taken over by the federal government, we just took their lease terms and put it over into ours. This was like state leased 340 and it went to OCS 310. So these were all ours after that date.

Then all of the new leases that were issued out here by the federal government is a Section 8 lease, which at a one-sixth royalty rate. But a lot of people said, "Well, you're getting gypped," but you're not because the Section 8 with one-sixth, when

you take the one-eighth one and add severance tax to it, it comes up to be almost the same. So, anyway, it started all that with the state leases and taking over these things.

Then what was the other question? I can't remember. You wanted to ask me?

JT: So from '64 to '66 you were working with the USGS in New Orleans, and then you transferred down to Lafayette as assistant district engineer. Is that correct?

EH: Right.

JT: So Lafayette had an office, a USGS office.

EH: Right.

JT: What was your job as an assistant district engineer from '66 until you became supervisor? That's ten years. There was a lot of activity going on. Why don't you talk a little bit about the development of those ten years.

EH: From when to when?

JT: From when you got to Lafayette in '66 until you became the district supervisor. It's about eight years. As you know, Mr. Hubble, a lot of development took place during those years.

EH: Oh, yes. First off, there was the districts: the New Orleans district, Lafayette district, and the Texas district. At that time, the Lafayette district was from Grand Isle to Intracoastal City.

JT: Wow, that's a big area.

EH: Big area. Big area. That's where all of the activity, all of the pipelines, just about everything was in this area. Now, there was quite a bit here, very little over here.

Anyway, anytime a lease is issued, they have a lease sale in New Orleans, they issue a lease. That lease comes out to whichever district it's in. If it was in Grand Isle or in South Marsh, Eugene Islands, Ship Shoal, Timbalier, it came to the Lafayette district. When the operator wanted to drill on there, that's a wildcat exploration, a wildcat, they would come to us and send us in an application to drill, and we would have people to take a look at everything. The drilling engineer would look at all the casing design. They look at everything. The geologist would look at it. And you have wells. Even though it's exploration, it might be an area where there's been some other wells drilled or whatever. Early time, there wasn't. There may not be anything around you, any information. In

the New Orleans office they have probably the most geophysical information of anybody on everything out there, everything.

So when a company comes in, they've got to file with them. They've got to file a shallow hazards information with us, to show there's not any shallow faulting or anything in there that would cause a blowout, because in the beginning—now I'm talking about now in the sixties, early sixties, when we came out here—that wasn't always looked at because what happened in a lot of cases, the CP Baker out there in Eugene Island that capsized, it was a catamaran rig, it was shallow and hit a pocket of gas, and it blew up around the catamaran. What it did, it lost its buoyancy and it went down, and then water came over it and got gas in it. They exploded, killed twenty-some people.

So as a result of all these things, we started looking at all of the shallow hazards, everything, and you'd be amazed how many times the operator would come in and say, "We do not show that there's any shallow hazards. Our line is 600 feet from the location." Our fellows would look at it and say, "We got one that's closer than that and it's right there, and it shows that there's something there." So we'd have to say, "Come over. Let's have a meeting. Bring your people," the geologists or geophysicists or whoever, "and let's sit down, talk about this." Sometimes we wouldn't approve the application until they moved the location or whatever to a better area.

JT: That's very interesting, because you guys were the experts on the geology as far as the federal lease lands. You guys had been accumulating this data over the years.

EH: Oh, yeah. Oh, yeah.

JT: So you guys, this department knew where there were faults. What other kind of shallow hazards might be involved, other than faults?

EH: Well, I can give you a good example of that. In South Marsh, about South Marsh 11—see, that's a silly thing about Marsh Island. The federal government, since the state had issued a lease, they didn't start until they got out a ways and they started putting these in, and they're like 200s, whereas all these others up close are 100s. But when they came back in and blocked this off, then they'll have some big numbers up close now.

But, anyways, about South Marsh 11, we got to noticing they were out there drilling, and we got to noticing a little oil spill coming up every so often, and we said, "Well, now this not right." So we could pinpoint where the rig was. We said, "This is close to where you all are, so you're going to need to send some divers down or somebody and survey the bottom to find out what's going on." They went down, and about 200 feet from where they were, there was an old

sunken tanker from the Germans had sunk it during the war there, and it was just laying there. Finally it had rusted in two, enough to let some of the diesel and stuff start coming out of it.

JT: That was really near where they were doing the drilling?

EH: Oh, yeah, about 200 feet, and they didn't even know it. See, that is before the beginning of when we really started getting serious about it, saying, okay, they have to clear the bottom on these things now. They have to go out and clear all of the bottom to make sure that there's not any hazards or anything out there. Fact is, if they have a jack-up rig—they lost so many jack-up rigs, topping off, because if you get one of them, like the three-legged thing and it goes out there and it puts one of the legs down in a hole and it's not stable, that thing can topple right over. Well, they make them go out and survey the bottom to make sure that you're going to go in there and put it next to a platform, that it's stable.

In fact, in one case, my son, he worked over there for Nippon Exploration in Houston. They had about a 40-foot hole next to a platform, and they had to go in there and dump a bunch of shells and stuff in there in that hole to be able to put the rig in there.

JT: I'll be. Any idea what year that incident was with the old World War II tanker?

EH: It was Dixieland Drilling Company. About early seventies.

JT: Boy, those U-boats got in close, didn't they? South Marsh Island 11 is—

EH: It's right up in here someplace.

JT: That's interesting.

EH: But, I mean, there's a lot of little things like that. I'm trying to think of this other situation that we had. Because I was surveying the bottom and things out there on these—well, anyway, these fishermen, if they hung up on anything, they would call us, let us know, because we even put out a requirement that says if you get hung up on it on your nets and you tear up your nets, the operator where the stuff is has got to pay you for your new net. You'll be surprised how many new nets was bought out there.

Well, anyway, this one shrimper called in, and he said, "I'm hung up. I've got something down here in my nets."

So we called the operator, and they went out there, and it was an old brass screw off of a big ship, and he had gotten that in his net. They brought it up and everything, the company did. Then he wanted it because he had found it. "Well,"

they said, "too bad. We got it." So they kept the thing, but it was a big old screw, the propeller off of the boat, and it was brass in there. So there's things like this going on all the time, I mean.

But you asked about what we did in the—let's see if I have something here. I have a job description on some of these things. On these job descriptions, they kept getting bigger and bigger and bigger as you went up the line, and I was looking at one of them here.

By the way, I had worked with so many different things, and I even worked with NASA on a project. I worked a lot of stuff, and I got nominated—well, I got selected for the second highest award in the Department of Interior.

JT: I'll be. What was that for?

EH: I can show you on this thing here. Here's where it was, right there, and I got it written up right in here if I can just find it again.

JT: So what was that project with NASA you worked on?

EH: I think it was under MMS. It might have been USGS. Anyway, since NASA has all this quality control offshore or on their space stuff and said they wanted to find out if it could come over, to bring it over into the offshore oil industry and see about quality control and what have you. So I worked on it with them, and we went to different plants and things. We went to Houston to the company's plant over there and find out about their quality control, and we found out, well, in a lot of cases, something they reject, they just throw it in a box over there, and then somebody else come along and say, "Well, look at that. There's a part right there that I need," and they didn't have good control over it.

But the problem that we ran into, the regulations that we had for offshore only encompassed about 10 percent of what the oil companies made, so they didn't want to have to redesign all of their equipment for 10 percent of the industry. So we had a hard time, but eventually we got it put in in the regulations—I can't remember which one it is now because I've been away from it since 1995, I retired and I've been away from it, but it was quality control, and they've got to know on certain things, they've got to be able to trace all the materials that's in it and everything. They got to know the type of material. But things that we consider as being critical, subsurface safety devices, surface control valves at the surface, things very important that you have to depend on if you had an accident, if you knew something failed that it would shut the well in, that it would shut in down hole.

See, a lot of our fires that we had and blowouts on platforms was due to the fact that we had velocity valves in there. I don't know if you know what a velocity

valve is or not, but it's a subsurface safety device that depends on—and you design it with beans and stuff in there to shut off. Say the well makes—you flow it at a rate of 1000 barrels a day, you would set it to where if that wellhead or something got knocked off, it would flow at 110 percent. It would shut it in. But the problem with the velocity valve was it didn't know the difference between bringing the well on or if you hit that flange up here and spread the flange and allowed the well to start leaking, it didn't know the difference between a leak or come on. So later on, as a result of that, we then started requiring that they have a surface-controlled subsurface safety device set at 3000 feet below the mud line so anytime you had any kind of a malfunction up here at the surface or whatever, it'll bleed off that thing and shut the valve down whole.

All of this equipment—see, this is one of the things important for the districts, everyone of these platforms is inspected once a year. They're inspected when they come on. They're inspected annually to make sure that every device worked. Well, I say that. It's changed some in that fifteen years since I left because we got so many of them and everything. But we used to check every device on that platform to make sure that it worked. If it didn't, we wrote them up, and if it was important enough, we shut it in, and until they fixed it and got everything taken care of before they could come back on. So I had a lot of calls at night. Man, you'd be surprised how many calls. Drilling rigs, BOP extensions, because on BOPs, they had to test them every seven days, and sometimes they were just getting ready to come out of the hole and their time was up and they'd want an extension.

JT: Blowout preventer.

EH: Blowout preventer, yeah. Anyway, so they would call and it might be midnight, it might be anytime. And we'd get calls on accidents and fires, and we had to investigate all accidents. I'm talking about if somebody got his fingers cut off out there, involving the equipment, not just got them cut off, but involving production equipment or something. We had to go investigate all that.

JT: I'll be. Sounds like a big task or a huge area for a small office, huh?

EH: Oh, yeah. Then later on, see, later on, after all of this and it just kept expanding, expanding, this was too much, and I had to get together on a piece of paper and show them how much work I had versus how much work they had over here, versus how much they had over here, and they said, "We didn't realize that you had that much more work than they did over here."

JT: You mean out in New Orleans per se?

EH: Yeah. They said, "Well, numbers doesn't mean a lot if you got so many APDs and all this," application to drill. But I said, "We've got so much more that we

got to look at and got to do than they do over here. You wonder why we can't make all of our inspections yearly, is because we got too many."

JT: Was there also a sense, Mr. Hubble, that this industry was expanding even further south?

EH: Oh, yes. Oh, yes. When we first came in, you're lucky if you got below 200 feet, 200-foot water depth. Most of it was jack-up rigs and all that, and then they just kept on evolving with different types of rigs and newer rigs and all that till—and just like now with all that going out here, and they drilling in 10- to 12,000 feet of water, you know. They can set a platform in it, but it's not setting on water.

JT: So at what point did they decide to break all this up and to have a few more districts added to the agency? Sometime in the seventies, perhaps?

EH: Yeah, when the Houma office was established. John Loren [phonetic] had worked for me and then he went on down there as the district supervisor. It was in the seventies sometime.

JT: So how many districts did they split it up to?

EH: Five.

JT: Five districts. Okay. So from three to five.

EH: Yes. And it went New Orleans, Houma, Lafayette, Lake Charles, Lake Jackson, over here. Still, Lake Jackson, they don't have as much going on over here as the rest of them, but right in through here in the middle and then right down here, all along here, you can see all the pipelines and things that's involved in that.

There's something else I was going to tell you a while ago. Oh, I know what it was. You asked me about this. See, at one time when this was stayed and everything, they had allowables. You know what that is? They issued the amount that they could produce, the well. So they issued allowables and sometimes they would go out and witness the operations, and sometimes people would just call them from out off there, and they'd write it on a piece of paper, and that's what they'd give them.

Well, then eventually it came up—and I think it was around in the early seventies, we took over the allowables, and at that time there wasn't any of this calling in and giving it to us. We went out and we witnessed every one of them, because we had more oil than they needed, and that was the reason for allowables, didn't want them to produce the well to the point where it started sanding up or it harmed the well. So we would have allowables that we set up all through here, and it would be allowables for the field or per well and so forth. Well, then later on got to the

point where we were getting so much imported oil and everything that allowables weren't necessary. They couldn't produce enough anyway.

JT: Still till today.

EH: Yeah, to this day.

JT: It sounds like you guys spent a whole heck of a lot of time offshore.

EH: Oh, all the time. That's where our job was. I mean, not the district supervisors, not the drilling engineers. Now, we went out quite a bit, just like on the Shell fire that they had at Bay Marchand.

JT: Marchand, M-a-r-c-h-a-n-d.

EH: Yes. That was in 1970. I was assistant district engineer, and we would go down there. It started in November or December. I used to know these. December, I believe. And we would go down, we'd have a person down there that could approve things on the spot. We also had like an inspector or a technician down there that could go around checking on things also, and if they needed anything, like they had three or four different relief wells drilling—see, at one time they had on that platform, they had something like twenty-some wells blowing and flowing and burning, because they were duals and all that. They had two rigs on the platform, see, two rigs drilling, one drilling the even and one drilling the odd.

When the thing blew out, caught on fire, well, boy, we had people down there, and I'd go down there and stay a week, and somebody else would come take my place and stay a week or so, and we would be down there until—I think it was about April before they got the thing under control. So, I mean, it was stuff like that constantly. I mean, I've seen all kinds of rigs, blowouts, fires.

JT: I guess like workboat accidents, you guys would get called for that as well? Or was that mainly Coast Guard?

EH: That's Coast Guard. Now, you say that because everything kind of got a qualifier to it. We had one where the people called in, they said, "Hey, by the way," said, "we had a boat tied up to our platform last night, and he's not there anymore. We can see the rope, but we don't see the boat." And he had sunk right there beside the platform, still tied up. [laughs]

So we went out to see what was going on, on the thing, but we really didn't have any jurisdiction over it because the purpose of us investigating, we had to do every investigation on the thing, had to come in and had to write up a report, and the lawyers loved it. Lawyers loved it because they wanted to see if we could

find where we might have said somebody is negligent or whatever. They were looking for it. So we tried to stay away from terms like that.

But, anyway, as a result of all these things, we would try to see where we could make things better, and we'd come out with these safety alerts, or it might require that the regulation be changed a little bit because of this situation. Or a safety alert would be issued and says to all the operators out there, "We had this situation to happen." We wouldn't say who it was or where it was. "And you might want to look at your facilities to see if you don't have this happen."

For instance, on every rig, they have to have a—you put it on the tubing. What do you call that thing? I mean, on a casing on their drill pipe. It's a valve that they put on their drill pipe when they stop, whatever, and that's so can't come out and blow through the drill pipe, and it has to be tested, has to be right there handy right on the deal. We'd go out there and we'd see something like brand-new and said, "Well, have you checked this?" "Oh, yes, we've checked it." "Well, let's check it again." And they couldn't open it because it had so much paint on it, it had frozen from the paint.

JT: Never used it once.

EH: Never had been used. They said, "Well, we just got it out here." Said "Well, it's not working. You haven't checked it." So we'd have to write them up for things like that and make sure that they had it, and then they would. It's a matter of correcting it, you could correct it right away when they broke it, maybe they checked it. Well, then, they could go ahead with it. But it's things like that that we had to check all the time and make sure that everything—a lot of people don't realize this, but when I was in there from '64 to '95, the majority of our people with the USGS and the MMS had experience offshore. Everybody just about had worked for somebody and knew about the oil [unclear] things, different things, how they hired from all different companies. Now, there were a few that came maybe right out of school or worked for somebody else and then they came on with us that didn't have that much experience, but the majority of the people had oilfield experience.

So when we'd go offshore, these people tell you something, you knew it wasn't right. There wasn't any way. We went on an accident one time that happened on this platform that's at the sump tank. This is where all the drains come to. They said they had a flash fire down at the sump tank. I said, "Okay. Well, who was there?" "This fellow right here." "Well, tell us what happened." "Well, I went down there and I just put my hands on that tank, and, whoosh, it ignited. It must have been static electricity." [laughs] Said, "Now, we've never seen any static electricity on any of these things offshore, but maybe it could be." But got to looking around and we found a cigarette lighter laying down there by the sump.

He'd gone down there and lit a cigarette, and it had caused it to ignite. But he wasn't telling the company people, because they would have fired him.

JT: It sounds like you guys had as much, if not more, experience than the drillers and the oil companies out there. It really sounds like it was much more of, again, a collaborative effort on the part of the agencies and the industries in moving into the offshore arena.

EH: It was. It was. And fact is, at one time—I don't like to get politics involved in it, but I worked under I don't know how many different Presidents and how many different Secretaries of the Interior, but it depend on which side or the other came in. Sometime they changed things because they thought they had to change them. It would be to the point where they—I get started on something like that and I forget what I was going to tell you. But they would have you changing stuff just for the sake of changing it because it had changed from Democrat to Republican or Republican to Democrat. It's hard sometimes to work and do what you feel like is right engineering-wise because politics get involved, and you say, "Well, this won't work." "Well, we want it to work."

It's kind of like the politician that said, "You know, these Russians have got too many submarines, and we need to heat up the ocean to 212 degrees and they'll have to surface and then we can destroy them." They said, "How you going to do that?" He said, "I don't worry about the operations; I just set the policy." And that's the way a lot of it was. Things that, especially sitting up in Washington, a lot of times they didn't realize.

They said, "Why don't you take a helicopter and go offshore and check on that?" Mm-hmm. Said, "You got three helicopters down there. Now why can't you use those to go out there?" And here they are, setting up here in Washington, D.C., and never been down here. Said, "Well, that would be just fine and dandy except we got fog and you can't go." It'd be something, some reason. It wasn't because we didn't want to go. It was just you couldn't go because of weather, and you're not going to make that. I went down in 1970 offshore in a helicopter.

JT: You went down in an accident?

EH: Uh-huh, yeah.

JT: Landed in open water?

EH: Mm-hmm, mm-hmm, at South Marsh 23. Another of my employees and I were out there, and the pilot at that time, they liked to use us, fly for us, because we would go to so many different platforms at that time. Not like it is now, because like I said, at that time we'd go from Grand Isle to over here to South Marsh Island.

The pilot had just—he was training. I'd been a trainer for the army and over in Texas at one of the bases, and they brought him on, and [unclear], and we were offshore at Marsh 23 and fueled up. This was in January. We started off, got about 300 feet, and he reached up there to hit one of the levers and hit the wrong one and ran us out of fuel. We set it down in 10-foot seas, one of them little bitty helicopters, just bobbing like a cork.

So they got a tug over there close and another boat was coming. I said, "You get that tug over here and I'm going to get off this thing." Well, they got it over there, and it's just bobbing up and down, and that blade hitting on the top of that tug. Anyway, we got off, and I hurt my back helping pull the other fellow off, because as we were reaching over to get a hold of him, that helicopter went down and the boat went up, and, boy, we were lifting a lot of weight.

So, anyway, the pilot just flat made a mistake. He reached up to hit the carburetor heat, because it was January, and he hit the mixture, which was on the left. It had the same throttle and the same arrangement, and when he pulled it, it ran out. So he lied to them and he told them he didn't know what happened, and they just brought it over there, because they were going to pull it over to a platform. They said, "Well, you just stay in here, and we'll pull this over to the platform and get this crane to pick us up." I said, "Nuh-uh, I'm not going to do that."

Well, they started pulling that thing. They didn't get 200 feet till it was turned upside down. See, it had pontoons on it, fixed ones, and upside down. So that didn't go very far. But anyway, from that point on because of the configuration, what they did, they put that one in a groove. So when you reach up there, you couldn't just pull it automatically; you had to pull it out and pull it down. So as a result of that accident, they made it safer.

JT: That's interesting.

EH: Yeah.

JT: You probably saw that a thousand times in your thirty years.

EH: Oh, oh, my goodness.

JT: Let's move on to a little bit further deeper here, and let's get into one area that you may or may not have had experience with. What about leasing? How involved were you as a district manager involved?

EH: Nothing. That's all done out of the New Orleans office. They did it all from the beginning. The people come in. They would nominate areas that they wanted to put up, and then they would put the areas up for sale after they'd analyzed them to

see that there wasn't any problems with any of them. They would put them up and it'd all be done out of the New Orleans office.

JT: So there were a lot of things that were happening in the seventies when you became district supervisor. One of the things was they finally divided it up amongst five districts instead of three. You've also got some big movement into our continental shelf and even further south of that. You've also got a lot of new environmental regulations. Can you talk a little bit about how that impacted what you did as it relates to offshore?

EH: About the environmental?

JT: You got Clean Water Acts in '72. You've got a number of different environmental regulations all throughout the seventies.

EH: Yes, but that was handled more by the New Orleans office. See, the Clean Water Act, we really didn't do anything with it, because they had to answer to EPA. They have to file on every permit. Every discharge point offshore, they have to have approval from EPA to do it. They have to test it and they have to file it, and so forth.

The only one thing that we did have, and I don't know if they still do it or not, but that was on the sewage disposal systems. Anybody that had more than, say, ten people had to have a sewage disposal system on there. Some had ones that burn. I forget what they call that. But, anyway, and then others had a sump system, and they had to maintain them. They had to test them. I heard somebody say the other day that they had to bring some samples in from offshore, and they had to get it checked and everything.

JT: What about flaring? Was flaring still an issue in the seventies?

EH: Not an issue, because there was quite a bit of flaring along, I would say, first early part of the seventies, maybe. There was flaring because if you had oil and you had the gas and it was below a certain amount, they would allow them to flare it so they could produce the oil, because they didn't have a pipeline, gas pipeline. Now, that's not in all the cases, because, boy, there's exceptions for every one of these things. In some cases, they would just send everything, blood, guts, feathers, everything down the line, and then when it got to onshore, then they would clean it up. I mean, they would separate it. So you've got all those. Then you've got others where they had oil line, pipeline, gas line, and each one of them was different.

Speaking of that Auger, you know we was talking about that Auger that they put in there in Garden—what was it? Garden Banks 426 by Shell in 1993, that platform right there, like I was telling you the other day, before that thing was

approved, it was setting down at Morgan City at Amelia, and we would go down. They'd ask us to come down there and check it out, the equipment on there, to see that everything was okay, that we didn't see any kind of a safety problem or anything that could take care of there, instead of waiting till they got offshore. So we inspected it two or three times, informally, for them.

Now, that deck on that platform is big as two football fields. That's how big that platform was. Two derricks on it. The upper section, they floated it out on a barge. The lower section, now I'm talking about the pontoons that goes underneath and holds this things up, buoys them up, was made over in Singapore. They brought them over, over here off of Galveston someplace. They sunk the pontoons down. They floated the platform here. They took it off of the barge and they floated it over here on top of this deal and mated them offshore out there. After they mated them, then they could buoy it and raise it up.

But that was mated, and then it was brought over here, and then it was anchored to the bottom. It's got cables that was bored into the bottom, and it's anchored to the bottom of those buoys. So it's held on location by those, and then they have the rigs. They had oil wells and gas wells on here. They only drilled about six wells or so, and they found out they had more oil and more gas than they had line capacity. The oil line went to Eugene Island to a platform. The gas went to—I don't know. I think it was Vermillion or somewhere in there, there was a line, and it goes up there. They found out not too long after they had it on, they didn't have enough capacity for that thing, so they had to come in here and lay another line to take care of all that capacity. They'd only drilled about six wells.

JT: So they knew there was a big find there, but the geology was wrong to the extent that they underestimated?

EH: They didn't realize those wells was going to make that much.

JT: Because in the seventies and eighties, I mean, most of what you were getting out here couldn't have been more than 5, 10,000 barrels a day. When you go out here, now you're looking at 100,000 a day, right?

EH: You mean total? Oh, yeah, some of these up here make more than that. Some of them, Eugene Island 330 area, they had a lot of production in there. But probably if you had 100,000 barrels a day, you had a good find, good production. Whereas they thought they had this one, but when they opened that thing up, they had more oil and more gas than they had anticipated, and so they had to lay some more lines. Really, that's a good situation.

JT: You don't mind spending the extra money on a pipeline [unclear] oil company.

EH: No. Give you an example for something right here. This Tiger Shoal. I go to church with a fellow that works there for used to be Texaco and now it's Chevron. That field was producing in the forties, late forties, and they had produced gas, I don't know how many different sands that they had, and it's still producing pretty good. Anyway, they drilled wells deeper out in that area, and they found more reserves than what's they've already produced.

JT: My goodness. Recently?

EH: Yeah.

JT: Right here in Tiger Shoal?

EH: Yes. Right up here next to the bank. Fact is, they got so much, they can't produce it because the lines. They haven't got any lines that can take care of everything, so they're limited as to how many they can drill. But below what they already produced, they've got more than what they had already produced up to this date. And that's the situation with a lot of these fields. There was one down here by Bay Marchand, that I think it was Gulf and Chevron, one of them had the lease, and they thought they had drilled down and got everything that they could find. So they leased out the bottom part of it to Gulf or to Chevron, and they found a whole big pool down below. They had to been about 500 feet from getting into it. So you're going to have on these structures—now, here's what's happened, though. You know what 3D seismic is?

JT: Yes, sir.

EH: Well, now they got the 4D. But, see, at one time it was just like 2D. It wasn't 3D, even. When they got into 3D, the 3D started telling them a lot more information and a lot better information. The 4D tells them more yet. So they're finding things in here now due to the geophysical that they didn't find before. So they'll go back into some of these areas. There's no telling how many times these have been done, but each time it's a different revised one or improved one or whatever, and they determine what they got.

JT: Let's back up a little bit before Auger. Let's talk about the big so-called deepwater leases of the late seventies that the government issued to companies like Shell to go in 1000 foot or beyond. We know a little bit about the challenges that that posed to oil companies and to drillers and to pipeline contractors. What types of new challenges did MMS and USGS personnel were faced with, with this new movement into the so-called deepwater at 1000 foot or greater, beginning with Cognac, the 1000-foot fixed platform? Kind of go through maybe some of the big challenges and the issues that you guys were up against with this movement to deep water.

EH: Really it didn't change anything as far as the district was concerned, other than the distance that we had to fly. Now, in some cases, for instance, Cognac—no, Auger, at one time we didn't have a helicopter where we could fly and get out of here, because like our fuel might have been way back here somewhere, and we couldn't fly from here with the helicopters that we had. Now, I'm not talking about ones that's for night and all that with the two pilots, the bigger ones. But if we fueled up here, and time we got out of here, we didn't have enough to get back to the spot. Well, boy, you're in a heap of trouble if you go out here and you miss it. You don't have anything. You just don't have anyplace to go. Whereas in some of these others, my gosh, you can see platforms just all through there. So one of the problems that they had was that.

Then they started getting some more places out deeper. But what they started doing was, when they went out there, they would go out there to inspect and whatever, they'd go out and they'd spend the night, because it took so long. But when you spend the night, you still have a problem, because you got to have a pilot that can inspect the helicopter. He can't leave that helicopter there. He's got to take that helicopter and fly that helicopter back to a spot where there's a mechanic or somebody. So you have a problem with that. But that was one of the problems that we had in the beginning, was the distance out here to these things so we could go and inspect them. Other than that, everything else is the same. I mean, a drilling application is essentially the same.

JT: Even for like a TLP? Is there any difference, from your office standpoint, from a TLP versus a fixed platform?

EH: No.

JT: There ain't no difference at all?

EH: No. Now, that's from the district. From the region, it is. From the region, they've got to analyze it for TLP, and the platform approval section over there, they've got to look at it that way. What they will do, because they're the ones responsible for all of that, once it gets over here, it's just ain't nothing different than if it's setting up here on something else.

JT: So you guys were mainly responsible—and I'm talking now for the deepwater platforms—mainly responsible from your district of safety, oversight, inspections, those types of things?

EH: Yes, yes, yes. Accidents, pollution. There's a requirement that any oil spill, anything that can put drilling muds over—I think. Don't hold me to this, because they may have changed a little bit. But at one time, drillings muds that didn't contain diesel or an oil-based mud could be dumped overboard. But I don't know if that's changed, because some of that depends on the area. For instance, in

areas—do you know where the Flower Gardens is? Okay. In the Flower Gardens area, they cannot dump over there because they will mess up some of the—

JT: The underwater life.

EH: Yes. Yes, so they cannot. It'll smother it. So they cannot dump it over there, so then the Flower Garden—that's one of the things that they're looking at. If they find in an area where they have these reefs and what have you, then there may be some other requirements put on it, because every one of them—when we got an application to drill, a lease in, it would have all these stipulations that's on there, and we would know what they are.

JT: So how many people were employed at the Lafayette district office under your supervision from the seventies until you retired?

EH: Twenty-two, I think it was. We had twenty-two, and that was at least twelve or fourteen inspectors.

JT: So when MMS came in in '82, you guys became part of MMS?

EH: Oh, yes. Yeah, just name change, yeah.

JT: So with only five districts and an average of twenty personnel per district, that doesn't seem like a whole lot of people to be managing this entire Gulf area.

EH: Now, see, here's what they did, though, at one time. See, when we first started, I told you I had geologists and geophysicists and everything. But then later on, they took those away from me, the geologists and geophysicists, and moved them back to the New Orleans office because they didn't have enough people and they didn't have that much work in the districts. So what they did, they took all of them back and put them in the New Orleans office, and that way they could let four do what six was doing.

JT: So every time there was a legislation change or regulation change, that really impacted your [unclear]?

EH: Oh, yeah, because you had to learn it. You had to be familiar with it. I mean, I got it out here. I'm not trying to blow smoke or anything, but look at there. That's just a partial list of things that I had to take, and I'm not the only one. We had to take water survival. We had to take everything.

JT: School of Sewage and Water Treatment, five hours, Biopure.

EH: Yeah, didn't know how to do it.

JT: Firefighting School.

EH: You know how the best way to tell whether it's working or not? It stinks, it's not working.

JT: Summer J Weld Log Interpretation Conference. First day of course, Blowout Prevention School. Man. Privacy Act. Defense Driving Course. Man, that's—what about like hurricane evacuation? Was that anything like that offered? Were any of you guys involved in any of that kind of stuff?

EH: No, because we came in and the operators were required to, if they're drilling a well, they would go down and set a plug. What do they call it? A something packer. A storm packer down the hole and shut the rig in, if it's in their area. I mean, if it's coming in New Orleans, they're not going to do it over here in Texas. But if it's headed their way, they have to do all these things and get prepared, and then they'll bring all their people in. They usually bring their people in a day or so before our people get in.

Now, one of the things that's very important is after the fact. After the fact, we go out as soon as we can. As soon as you can fly, we go out to see what the damage is, and we found rigs floating around out there, nobody on them. They broke loose and they're floating. And we'd go out to see if there's any oil spills from anything, anything going on that we need to know about. Then, see, they're required to call in also all their damage and stuff. Like this last one came right through here, right through this area through here, and it did a bunch of damage right there. Believe it or not, shallow stuff, didn't bother. But right through about 300 feet of water, it toppled some of them. It turned them over and all kinds of things. Some of them, probably, they was probably old ones anyway.

JT: One of the last things I want to get to is, since I think you probably have a little bit of experience in that, is the decommissioning, plug, and abandoning. But with respect to hurricanes, if you left in the mid nineties, I guess the only maybe big one that you might have been involved with was Andrew. But let me back up just a little bit and ask just a couple of questions about the eighties and how certain legislations during that time impacted your office. What about the area-wide leasing? Now you've got such a broad-based area. Instead of just small blocks, companies are allowed to lease huge chunks. Do you recall that period?

EH: We never had more than 5,000 acres. That's a lease. Well, that or less. Off Louisiana, it's 5000 acre blocks. Off Texas, it's 5260, because it's different. It came in under a different agreement than what the rest of it did, and so that's 3 square miles, I think. Then on this one, it's 5000 blocks. But there might be a half a block or something like that was leased, but you won't have any more bigger than that. Now, they might have several different ones right there. They might have got five or six in an area adjacent. Most of them, that's what they

want to do. What they're trying to do is they map it, they find out what the structure encompasses, then they go out there and they'll try to lease the areas that covers the structure. But that don't always work.

I saw where Gulf Oil bought a lease and went out there, and they thought they were going to put a platform in there and set the platform down, and drilled some dry holes. They was right on top of the salt dome. [laughs] They did. They hadn't analyzed it good enough. So then they set some platforms around it. So what most of them will do, and this is what a lot of politicians don't understand—whenever you're leasing like that—in fact, I was on a case with IRS as an expert witness, because they were wanting to charge off some intangible drilling costs. You know what that is?

JT: Yes, sir.

EH: And they wasn't going to allow it. I said, "Whoa, now. I'm supposed to be on your side, but I'm not, because you're not right." This intangible drilling costs, they can go out here and think, "Okay, this is where we want to go and see where we want to set a platform. We go in here and we'll drill. We'll drill on this block. We'll go in and we'll drill an exploratory well where we think we might be a good place to put a platform." So they'll drill an exploratory well, say, [whistles], "We found out now what we need to set the platform is clear over here, because this is not what we thought it was. We need to set it over here." So there may be in some cases two or three exploratory wells drilled on here to determine where to set the platform. Then when they come in with the platform, then they'll start drilling all these directional wells out like this and on there.

At one time we got blamed in the early seventies. I know CBS went out there and they said, "MMS is letting the oil companies drill wells, and they got production and they're plugging them, not wanting to produce them." Well, that wasn't the thing at all. They might have drilled this well and they found out that it was a zone down here and it was productive, but it wasn't a good place to set the platform. So they would set the platform, and then they would drill all these wells off the platform to take care of it. But they said, "Oh, they're drilling wells and plugging them," to keep from producing oil. That wasn't the case.

JT: So that oil prices would go up.

EH: Yeah, yeah, yeah.

JT: In the seventies.

EH: But, anyway, on the deal with IRS, I went to Denver and to Dallas, and I had lawyers and everything, and I said, "Y'all are barking up the wrong tree." They said, "Well, we got to challenge them. We denied it, and so they've come back

and going to prove us wrong." I said, "Well, you are wrong," and they got it. They got it approved. See, what it is, they get to write these off as expenditures on this lease, and really that's what it's for. I mean, that's the purpose of it.

JT: Another kind of big significance in all of that was to kind of help finance the deepwater development, is to give companies some incentives, tax incentives or what have you, to write off certain kinds of equipment or operations so that companies can afford to go way out there and [unclear].

EH: Right. What they don't realize, and the fact is, they just had a problem with some of those leases that's out in deep water, in some cases they didn't have to pay any taxes until they produced it for so many years or whatever. I forgot the requirement on it. But they were criticized here, I know, the other day or sometime, because they said, well, the MMS had let them do this and not have to pay any taxes. Well, it's so they can recuperate a lot of their costs.

I was telling you about my son worked for a company in Houston. He's not there with them now. But they bought into a deepwater project out here. The operator that had it had about four or five wells on there, and so they bought an eighth of an interest in that lease, and I don't know, the thing was producing like 4000 barrels a day or something like that, the platform, and they're still drilling some wells. That eighth interest in that thing cost them 800 million dollars, 800 million for an eighth. And every well that they drill that's a satellite and they bring it back over to this platform, to the structure, it's 150 million to drill the well, and that's not completed or anything; that's just to drill the well.

So you think, Auger, I know on that, that's over a billion dollars for that platform. That's before they ever got it out there, before they ever got it out there, got the lease, got everything together, put it out there. So you say, boy, they're making lots of money. They put out a lot of money, too, and they don't realize it.

I had people come to my office, and they'd be from Midland, Texas, and they wanted to get into the oil business. They'd heard that the offshore was the place to go because they made lots of money. Said, "We've got 5 million dollars we'd like to spend and get offshore." I said, "Well, you'd just as well go back to Midland, Texas, because you're not even going to get the boat to get out there." It's too expensive. They don't realize this.

Here's something else that we were involved in a lot, is the abandonment procedures, the abandonment on these leases. I've been on a lot of them where they go out there and they have to remove, plug all the wells. They've got to cut them all off at least 15 feet below the mud line, remove the structure. They've got to go out and dredge the location to make sure that there's not anything left on location. If there is, they've got to clean it up. So there's a lot involved in just on the plug. And a lot of them, see, here's what happens. All these companies, they

had a lease for quite a while and they got several platforms and what have you, and the production's coming out. They like to sell it to somebody else because they don't want to have to plug it.

JT: Like, for example, when Exxon sold a good bit of their assets right here on the shelf, they went to other parts of the world in the seventies and eighties and left kind of the independents like Apache and Devon with a lot of the assets in here that are old, dilapidated, but yet they're not [unclear].

EH: Here's what the MMS did. They had a deal over here where they called in and the fellow that's drilling the well said, "The operator's not paying us. We're held at a million-and-some dollars. We're moving off." I said, "Well, what's the status of the well?" Said, "Well, we're down here, I don't know, so many thousand feet." Said, "You can't leave it open. You're going to have to do something." He said, "I'm moving off." I said, "No, you're not."

So I called my boss and we got back with the company, and finally Kerr-McGee was the one that had had that lease at one time, and they farmed it out, sold it to this other company. Well, Kerr-McGee had them go ahead and put a plug and everything in that well, and so ended up, Kerr-McGee was trying to get out of it and these people were going bankrupt. I went to a hearing in Appaloosas, and they were going bankrupt, before the judge up there.

Anyway, Kerr-McGee went ahead and paid the old boy on this, and they tried to get out of it. MMS said no. They made it, see, if you got that lease, I don't care how many times you give it out to somebody else, if they don't plug it or fix it right, you are responsible for it.

JT: The original owner?

EH: Yes.

JT: All the way back to Kerr-McGee?

EH: Yes. So Kerr-McGee went in there, and I went out there and witnessed the operations on taking the whole platform and everything.

JT: So that's a policy that still holds true today and has got really big implications, especially after hurricanes, and even in the five-year regulations that MMS has, that if it's a non-producer, you've got to remove it after five years.

EH: In a lot of cases, if it's non-producing, then there may not be anything there to remove. I mean, if you drilled three wells and plugged them, there may not be anything there to remove, so they may automatically just go by the wayside. There's some that's, what, seven-year leases. So, anyway, there may not be

anything there. In fact, what happened a lot of times, they'd go in and they'd buy a bunch of leases, and there was no way they could develop all those leases, and so they get down to the end where its five years was just about up, and they were out here wanting to drill on the well, on this lease, to hold the lease or try to farm it out to get somebody else to drill on it before the five years was up.

But, anyway, this was fifteen years ago that I'm talking about Kerr-McGee. Ninety-five. Yeah, fifteen years ago. That's what MMS held Kerr-McGee responsible for, for that lease. So I'm assuming that from since that I'm not in there now, that still that's what they require, because they said you can't get out of that obligation just because you leased it off to somebody else. You put the things there, you're responsible for them.

JT: Was that one of the first incidences that involved kind of a legal situation like that?

EH: Oh, yeah.

JT: With the Kerr-McGee. Do you remember what block that was in?

EH: It was in Vermillion something. Vermillion.

JT: So in '94, '95, sometime around there?

EH: Yeah, maybe earlier than '92. I don't know. It's somewhere along in the nineties, because I know I went down there and was witnessing the operations on that thing, cleaning it up and everything.

But a lot of that stuff they think, well, you just go out there just because you want to go out there and eat, but you can learn a lot. You can learn a lot from being out there, how it's done, how it can be done better. For instance, I saw on a platform out there, these platforms come down and these legs, they come down like this. Well, when they go to cut them off, they'll run in here and try to clean out, and then they put a charge in here and blow it off below the mud line down here. Well, I found out in some cases out there it was hanging up, and the pipe that they had in here, casings, they might have been 13 and 5/8 or something size, and they'd run a bit maybe 6 inches inside of this thing. Well, being at an angle, what would happen—

JT: It was blowing off to the side?

EH: Yeah. See, it was coming down and it would go off to the side. What this thing was down here, it would be off to the side. Well, when it blew, it'd blow this, just destroy this side here, but this side would be hanging up. What they needed to do was run this thing on a centralizer or on something to where they put it in the

center of the hole so when they set it off, because we minimized it. See, this is something else. We had the National Marine Fisheries and stuff that even is on location and was there to see we didn't have too much fish killed. Because, see, what happened originally they come out here, "Well, if 100 pounds will do good, let's put 200 pounds in there, and it'll be sure and blow it." Well, it had stun all the fish around there and killed the fish and what have you. They was wanting to make sure they was protecting the turtles. So, anyway, we tried to get them to minimize it. Well, it was hanging up, but if they put this thing in here centralized to where this charge would hit both sides, it would shear that thing off. But just things like that that you can learn, and you can't learn it from being in the office.

JT: Tell me a little bit more about the early days of decommissioning and plug and abandonment, maybe some more examples like this of what was occurring in the late eighties and nineties as the infrastructure here is getting a little old, as you have incidences like with the Kerr-McGee where you got to start removing stuff. Tell me a little bit more about what an engineer does from your perspective.

EH: The problem now, I just ran into this because with my son, he told me about it. One of these leases out here has platforms and they might have twenty-four wells, eighteens. I don't know if you know what an eighteen-slot or twenty-four-slot platform is.

JT: Yes, sir.

EH: Okay. They might have twenty-four or eighteen wells on a platform, and how those eighteen, there may only be five or six of them still producing, and the others are just shut in or what have you. Well, they don't want to go out there and spend money to plug and abandon these over here. They say, "Well, we might need those down in the future." Well, they just don't want to spend the money on it. So the MMS has come in here recently and said, "Look, because of hurricanes and blowing them over and everything, if you've got platforms where you got a lot of wells on there, and they're not being used and you have no use for them, we'd like to have them removed." So they went in down here at Main Pass and they removed on three platforms, I think there was forty-some wells that they [unclear].

JT: Who paid for that, the company?

EH: Oh, yeah. Oh, yeah. They paid for it to get it out of there. But now they don't have to worry about it if something should happen that the platform—and here's something else you got to stop and think about. If you got a platform where you got all these stubs sticking through here, and a hurricane comes along and you've got these seas that's fifty foot high, you just got more resistance to these waves for it to cause it to topple over. So the more you can get of these taken out if you're not going to use them, the less resistance that you'll have.

JT: Now, that's probably a newer deal.

EH: It is, yes.

JT: You were still around for Andrew. Tell me a little bit about some of the damage that Andrew caused and if that produced any kind of changes from an MMS regulatory—

EH: I have to stop and think when Andrew come in.

JT: Andrew was '92. It came up through Vermillion Bay in 1992.

EH: We didn't have any problems.

JT: So there were no other hurricanes during the time that you worked there in the eighties and nineties, nothing big?

EH: No, because I can go back. The one before that really messed us up was Hilda. Hilda in '64 came up through here, and it toppled some, because I was out on one on Eugene Island 32, I think it was. Maybe it was further than that out. Anyway, it was an old Tenneco platform, and they had wells that had quintuples in it. That's five zones. That thing's all underwater, and they had to go in there and tie onto each one of those zones and pump into them and what have you. So it took quite a while to get that thing cleaned up. But other than that, we never had—a lot of the hurricanes that come through maybe knock out a sump tank.

JT: Nothing like 2002, 2005, 2008?

EH: No, no, no, no, no.

JT: I bet you're glad you're not working there anymore, huh? What a headache that must be for those guys down there.

EH: Oh, yeah.

JT: What about some of the big stuff, like if you retired in '96—is that correct, sir?

EH: Ninety-five.

JT: Ninety-five. So you had Auger, you had Mars, you had some of the other big stuff.

EH: No. But I didn't have that. Only deepwater platform I had was Auger. That's the only one that I was ever on. These others, I think, at one time we got an

opportunity to go out on them and see the one at—not the Mars, but the Cognac, but I didn't go. But I think some others did, went down to see it. But that's the only deepwater project that we had.

JT: So were you there for the installation?

EH: Oh, yes.

JT: Really?

EH: Yeah.

JT: Were you on a boat?

EH: Oh, you mean on the installation. I thought you meant was I in the office during it. No, I didn't go there for the installation of it, because, like I told you, they put that together over here by Galveston and then towed it over here and then put it down.

JT: So as a district manager of this region, what was your responsibility for that Auger platform? What was your district's responsibility?

EH: After it was set, to make sure when they wanted to go in and start drilling, that they have—we had to do all the drilling permits. We had to go out and inspect it. Then after it was completed, we approved all the production equipment on here also.

JT: Pipelines?

EH: No, not pipelines. That's in New Orleans. All production equipment, separators, all that type thing, all the devices on it, everything, had to be in accordance with—I can't remember anymore what. There was an OCS order that covers all that, and had to meet all those, had to have all those safety devices, and then our people would go out and make sure that that was inspected and make sure everything is working right and all that.

Then the only other thing that would be involved would be like completions. If they wanted to re-complete a well or do something, they would come in, tell us what they wanted to do, and so forth. If it got down to a point—I don't think they have yet, but to plug and abandon, they would come in with a notice to plug and abandon, and we'd have to make sure that they had all the zones covered and all that.

JT: Do you recall if there were any issues as far as things that were missing, they had all their x's crossed and—

EH: Shell, you don't have to worry about Shell Oil Company. They were good. They're a good operator. They got a lot of expertise. They did have the blowout down here, but that wasn't—

JT: So really the only, like you were saying before, was the helicopter ride. These platforms, these refueling stations, tell me a little bit about them, because that's the first that I heard of that. I was aware that there were fueling stations offshore, but I wasn't exactly sure where. Tell me a little bit about the history of those. Is that an oil production platform that just so happens to have—

EH: Yeah. For the operator, they'll want it there for their own use, and so they'll have—it's a manned platform, and you don't put it on—well, I take that back. I think there was some that was on unmanned platforms. But on a manned platform, because, see, at one time they just kind of stick that hose down on a deal there, and if there's any aviation fuel, well, it'd go down in the Gulf. We said, "You can't do that." So they'd have to pipe it to where it would go to the sump and what have you, so it wouldn't create any kind of a slick. So as time went by, they just started doing more development out here, and requirement came in. We got every one of them at the office. We know exactly where all the fuel stops are and everything.

JT: Do you recall off the top of your head any particular platform out there that you might have flown? Were there only certain ones that had aviation fuel?

EH: Oh, no, there's a bunch of them.

JT: They all had aviation fuel.

EH: Oh, yeah, a lot of them, a whole lot of them after a while. But the problem that we ran into, I was telling you about before, it was only a certain distance out. As it started developing deeper, we didn't have them. Then gradually it started getting more platforms and more fuel stops and everything further out.

But everything is computerized in our office here. It's computerized, every inspection. They got it all computerized, that tells when it was put in, how many wells, all of the things that's on there, so we would know if it had a fuel stop, we would know everything about it, every platform that's on there.

JT: So who took over for you when you moved on?

EH: A fellow named something Smith. He didn't even work here. He'd worked for Kerr-McGee at one time and then retired from Kerr-McGee, and they hired him in Lake Charles, and then he moved over here. Something Smith. I can't think of it.

JT: Is there anybody else from your old work buddies, maybe somebody from another district, who you might recommend that I try to contact, who's possibly be retired now and has some free time to talk?

EH: Oh, yeah. I'm trying to think of the best one. But along the lines of what you asked me?

JT: Yeah.

EH: John Boren [phonetic] in Houma. He's in Houma. He retired from the Houma district.

JT: I'm going to leave you with a card.

EH: And I'll tell you, I'll tell you somebody else. You need to go there anyway. You need to go to the New Orleans office. You know where it is?

JT: Yes, sir.

EH: Go to the Public Information Office and look at stuff over there. But Dan Bourgois, he was my boss at one time here, and Dan has handled all of the—like New Orleans, he used to work in the unit section, unitization, and that's a completely different ball of wax. He worked in the district, but he was the regional supervisor for field operations.

JT: During the period we're discussing?

EH: Yes. Now, did you ever hear the other fellow that was in there?

JT: Nuh-uh.

EH: Okay. I'm not going to say any more. [laughter]

JT: So you got any opinions about some of your former Secretary of Interiors that you worked under?

EH: Oh, there's some that's good, some very knowledgeable, and some that's not so knowledgeable, but a pretty good bunch of people. They always have some that's—this fellow John Boren, he's in the Houma district in Houma, Louisiana. I don't know what his phone number is or where he lives down there, but they have an MMS office down there.

It's amazing in fifteen years how many people has—I don't know anybody over here now. I don't know if you'd want to talk to any of the inspectors or not. I just don't think it'd do you that much good. I had one that he's retired and he lives

here now. But I think what you're wanting to know is more like here and then Dan Bougois. I think Dan might be able to really help you.

JT: Regional supervisor. So he would have been out of New Orleans?

EH: Oh, yeah. But he used to be here, and then when he moved out, I took his place. But he's familiar with all the platform approvals, all of that, and he was here when I went to work for him. In '61, he was here. That's the problem that you have, like John Boren, he didn't come on till later on. He came to work from Shell, but he's familiar with all of the district operations. But a lot of them, even Bill Martin, was Dan's assistant in New Orleans and my boss, they would be working on a project over there, and they'd call me after I retired and want to know why we did so and so. "Why did we do this?" Because they didn't know what the history was. "Why did we require such and such?" I said, "I'll tell you why we required it." He said, "Well, I knew you'd know, but I didn't know. Somebody asked us and we didn't know why." And you have that happen. After a while, you just lose all you know what about the old stuff. All you know is the new, and I don't know the new now. Because now I see the MMS has got a website. You been on it?

JT: Oh, yeah.

EH: Well, anyway, I used to get on that website when I worked for [unclear] every day to see what the new stuff was.

JT: They didn't have that back in the day.

EH: No, nuh-uh. Nuh-uh.

JT: So, thirty years with the MMS. It sounded like you enjoyed your time there with the agency.

EH: I did.

JT: It sounded like a lot of work, too, a lot of offshore.

EH: Thirty-four years I worked for them. Well, thirty-three years, but then I had a year of sick leave that kept them. So, anyway, I enjoyed it up until the last year, and the last year it was a chore for me to go to work, and I knew then it was time for me to go.

JT: Why? Why was it such a chore?

EH: They was changing things so much, changing stuff. I don't know. Before, it didn't bother me.

JT: Like processes or the way of doing—

EH: Regulations. Changing regulations and things and a lot of the stuff. I'm talking about even like in personnel, like in our job here. You start supervising people and not doing engineering work, and after a while it's, you know, it's dogs I like, it's people I can't stand. I enjoyed the engineering part of it and everything, but when it gets to people, it gets picky. It gets picky. And every year we'd have to evaluate everybody, and somebody in Washington, D.C. would come up or they'd be put into this position, and they would come up with a new way of having to do it, inventing everything. There isn't no new. So they'd come out and every year you'd have to learn it all over again. I said, "There's got to be a good way to do this and leave it alone."

JT: Mr. Hubble, I'm going to say thank you. I'm going to put a stop on this right here.

[End of interview]